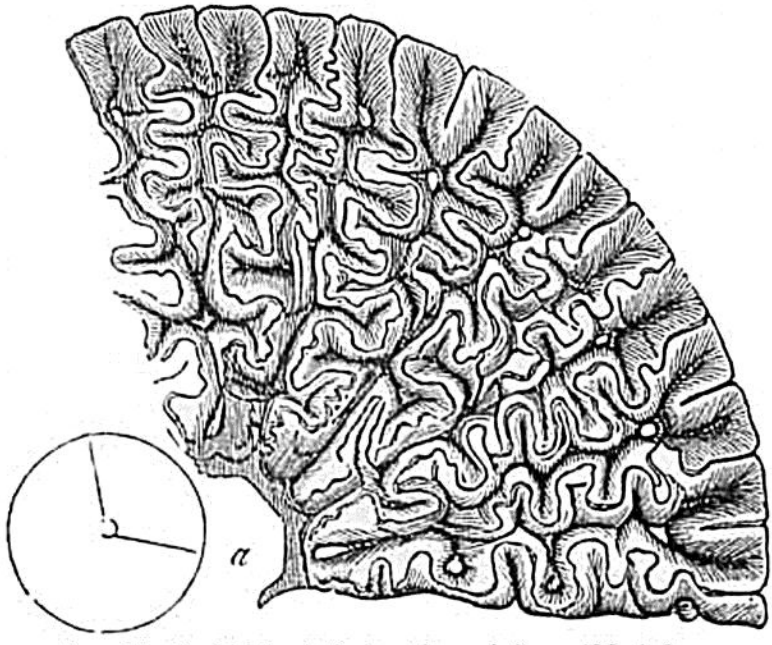
438) of part of one is given from his "Odontography," plate 64, A. The entire length of this tooth is supposed to have been about three inches and a half, and the breadth at the base one inch and a half.

Fig. 438.



Transverse section of tooth of *Labyrinthodon Jaegeri*, Owen (*Mastodonsaurus Jaegeri*, Meyer); nat. size, and a segment magnified.

a. Pulp cavity, from which the processes of pulp and dentine radiate.

When Prof. Owen had satisfied himself, from an inspection of the cranium, jaws, and teeth, that a gigantic *Batrachian* had existed at the period of the Trias or Upper New Red Sandstone, he soon found, from the examination of various bones derived from the same formation, that he could define three species of *Labyrinthodon*, and that in this genus the hind extremities were much larger than the anterior ones. This circumstance, coupled with the fact of the *Labyrinthodon* having existed at the period when the *Cheirotherium* footsteps were made, was the first step towards the identification of those tracks with the newly-discovered *Batrachian*. It was at the same time observed that the footmarks of *Cheirotherium* were more like those of toads than of any other living animal; and, lastly, that the size of the three species of *Labyrinthodon* corresponded with the size of three different kinds of footprints which had already been supposed to belong to three distinct *Cheirotheria*. It was moreover inferred, with confidence, that the *Labyrinthodon* was an *air-breathing* reptile from the structure of the nasal cavity, in which the posterior outlets were at the back part of the mouth, instead of being directly under the anterior or external nostrils. It must have respired air after the manner of saurians, and may therefore have imprinted on the shore those footsteps, which, as we have seen, could not have originated from an animal walking under water.

It is true that the structure of the foot is still wanting, and that a more connected and complete skeleton is required for demonstration; but the circumstantial evidence above stated is strong enough to produce the